

Remarks

Reexamination and reconsideration of this application, as amended, is requested. Claims 4-7 remain in the application and claims 9-14 have been added.

Applicants respectfully submit that no new matter has been added and the amendments made above do not create estoppel that limits the scope of the claims.

Support for Amendments

As indicated above, claim 9-14 have been added. Support for the amendments is shown at least by the examples illustrated in FIGs. 2-19 and described in the corresponding text.

In addition, claims 5 and 7 have been amended to correct other minor and inadvertent grammatical errors. This amendment truly cosmetic and, therefore, does not affect the scope of the claims or create any prosecution history estoppel.

Applicants respectfully submit that no new matter has been added.

Response to the 35 U.S.C. §102(b) Rejection

The Office Action rejected claim 5 under 35 U.S.C. §102(b) as being anticipated by Wada et al. (US 5,087,584). Applicants respectfully traverse this rejection in view of the remarks that follow.

As is well-established, in order to successfully assert a *prima facie* case of anticipation, the Office Action must provide a single prior art document that includes every element and limitation of the claim or claims being rejected. Therefore, if even one element or limitation is missing from the cited document, the Office Action has not succeeded in making a *prima facie* case.

With respect to claim 5, it is respectfully asserted that, as one example, Wada et al. fails to meet, either expressly or inherently, is anisotropically etching

said dielectric layer from said first drain region and said second drain region so as to form a first spacer on the side of said first stack adjacent to said first drain and to form a second spacer on the side of said second stack adjacent to said second drain wherein in after said anisotropic etch steps said gap remains filled with said dielectric.

To begin, Applicants would like to kindly point out that the Office Action did not provide any explanation as to how Wada et al. teaches or suggests that layer 35 is etched to form spacers.

In addition, Applicants would like to kindly point out that Wada et al. expressly states that layer 35 is a planarization layer upon which a conductor is formed. In other words, layer 35 is not etched to form spacers. Wada et al. even states that care must be taken to avoid over etching of layer 35 which might result in exposing dielectric layer 22 or floating gate members 21.

Accordingly, Wada et al. cannot anticipate Applicants' claim 5. Additional arguments to distinguish the cited patent from claim 5 could have been made, but it is believed that the foregoing discussion is sufficient to overcome the Examiner's rejection.

The Office Action also rejected claim 6 under 35 U.S.C. §102(e) as being anticipated by Chi et al. (US 6,184,084). Applicants respectfully traverse this rejection in view of the remarks that follow.

As is well-established, in order to successfully assert a *prima facie* case of anticipation, the Office Action must provide a single prior art document that includes every element and limitation of the claim or claims being rejected. Therefore, if even one element or limitation is missing from the cited document, the Office Action has not succeeded in making a *prima facie* case.

With respect to claim 6, it is respectfully asserted that, as one example, Chi et al. fails to meet, either expressly or inherently, forming an interpoly dielectric on said patterned first poly silicon film.

To begin, Applicants would like to kindly point out that the Office Action did not provide any explanation as to how Chi et al. teaches or suggests that first poly silicon layer 44 is patterned prior to the formation of interpoly dielectric 46.

In addition, Applicants would like to kindly point out that Chi et al. expressly teaches that layers 44, 46, 48, 50, 52, and 54 are all etched together (see FIG. 3F). Therefore, Chi et al. cannot teach or suggest forming an interpoly dielectric on a patterned poly silicon film.

Accordingly, Chi et al. cannot anticipate Applicants' claim 6. Additional arguments to distinguish the cited patent from claim 6 could have been made, but it is believed that the foregoing discussion is sufficient to overcome the Examiner's rejection.

Response to the 35 U.S.C. §103(a) Rejection

The Office Action also rejects claims 4 under 35 U.S.C. §103(a) as being unpatentable over Witek et al. in view of Arghavani et al. Applicants respectfully traverse this rejection in view of the remarks that follow.

THE PROPOSED MODIFICATION OF WITEK ET AL. WOULD RENDER THE STRUCTURE UNSATISFACTORY FOR ITS INTENDED PURPOSE

As discussed in M.P.E.P. §2143.01, if a proposed modification would render the device shown in the cited patent being modified unsatisfactory for its intended

purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

As admitted by the Office Action Witek et al. does not teach or suggest growing and removing a thermal oxide from a trench. The Office Action indicated that the structure and process shown in Witek et al. could be modified as to include an oxidation and etch process as taught by Arghavani et al.

However, Witek et al. state that the thermal oxide layer remaining in the trench (i.e. liner 212) is between 100 and 500 angstroms with 200 angstroms being optimal. Therefore the modification proposed by the Office Action is contrary to the express teaching of Witek et al. which calls for the formation of liner layer 212. Therefore, no combination of documents art can make obvious the removal of the thermal oxide layer when Witek et al. requires and expressly teaches leaving the thermal oxide layer in the trench.

Thus, there can be no motivation to combine the references as suggested in the Office Action. Accordingly, Applicants respectfully traverse the rejection of claim 4.

The Office Action also rejects claim 7 under 35 U.S.C. §103(a) as being unpatentable over Wada et al. in view of Wang et al. Applicants respectfully traverse this rejection in view of the remarks that follow.

It is well established that obviousness requires a teaching or a suggestion by the relied upon prior art of all the elements of a claim (M.P.E.P. §2142). Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of Wada et al. and Wang et al. does not meet the requirements of an obvious rejection in that neither teaches nor suggests anisotropically etching a dielectric to form a spacer.

As discussed above, Wada et al. does not teach or suggest etching BPSG dielectric layer 34 to form sidewall spacers. Further Wang et al. does not teach this feature either. Since each patent, taken separately, is devoid of any teaching or suggestion of at least one limitation recited in claim 7, the combination of Wada et al. and Wang et al. cannot make Applicants' claim 7 obvious.

Conclusion

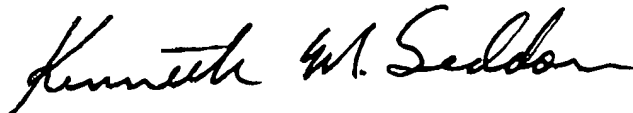
The foregoing is submitted as a full and complete response to the Office Action mailed December 6, 2001, and it is submitted that claims 4-14 are in condition for allowance. Reconsideration of the rejection is requested. Allowance of claims 4-14 is earnestly solicited.

Should it be determined that an additional fee is due under 37 CFR §§1.16 or 1.17, or any excess fee has been received, please charge that fee or credit the amount of overcharge to deposit account #02-2666.

If the Examiner believes that there are any informalities which can be corrected by an Examiner's amendment, a telephone call to the undersigned at (480) 554-9732 is respectfully solicited.

Respectfully submitted,

Krishna Parat et al.



Kenneth M. Seddon
Senior Patent Attorney
Reg. No. 43,105

Dated: 7-08-02

c/o Blakely, Sokoloff, Taylor & Zafman, LLP
12400 Wilshire Blvd., Seventh Floor
Los Angeles, CA 90025-1026
(503) 264-0967

RECEIVED

JUL 17 2002

OFFICE OF PETITIONS